

What is claimed is:

1. A method for implementing an embedded system for mobile communication, the method comprising the steps of:

5       a) implementing a cross-development environment for a target system;

      b) implementing a network environment for communication between a host system and the target system;

      c) configuring a boot loader of the target system;

10       d) configuring a kernel of the target system, wherein the kernel is an embedded Linux kernel; and

      e) implementing a graphical user interface (GUI) environment for the target system.

15       2. The method as recited in claim 1, wherein the step a) includes the step of a-1) performing an initial compilation of a gcc package using a gcc bootstrap compiler by a gcc bootstrap compiler, wherein the gcc bootstrap compiler has a function of preparing header file and libraries.

20       3. The method as recited in claim 1, wherein, in the step b), communication between the host system and the target system is established based on a trivial file transfer protocol (TFTP) via an Ethernet.

25       4. The method as recited in claim 1, wherein, in the step c), the boot loader in the target system is implemented

by using a read only file system as as a root file system.

5.       A   Linux-based   embedded   system   for   mobile  
communication comprises a central processing unit (CPU), a  
5   synchronous dynamic random access memory (SDRAM), a flash  
memory, a universal serial bus (USB) slave, a joint test  
access group (JTAG), an universal asynchronous  
receiver/transmitter (UART) and an Ethernet, wherein the  
memory provides a storage place for a boot loader so that the  
10   system boots by means of loading the memory with a boot image  
and USB and Ethernet provides an interface between a host and  
a target system.